

ABSTRACT

A motion decision value provides a dependable estimate whether motion occurs in a given region of a video image in an interlaced video sequence. The motion detection is particularly applicable in the conversion from interlaced video to progressive video. An input first is fed to an absolute value former which computes a frame difference signal from a difference between the first field and the second field in one frame. A point-wise motion detection in the frame difference signal is then followed by a region-wise motion detection that combines the point-wise motion detection signal with an adjacent point-wise motion detection signal delayed by one field. The motion decision value is then computed from the region-wise motion detection signal and output for further processing in the video signal processing system, such as for choosing whether the spatially interpolated video signal value or the temporally interpolated video signal value should be used for the output.